

Claims

1. A device for laying out a conveying track (03) for conveying a flow of flat objects to be deposited and a plurality N of paddle wheels (08), each with at least one compartment (11) delimited by a paddle (09) for taking over an object from the conveying track (03) and depositing the object at a deposit location (17), characterized in that the paddle wheels (08), which are arranged one behind the other along the conveying track (03) and touch the conveying track (03), are rotatable with such a phase shift in respect to each other that of N objects conveyed one behind the other on the conveying track (03) each one reaches a compartment (11) of another paddle wheel (08).

2. The device in accordance with claim 1, characterized in that the paddle wheels (08) are arranged below the conveying track (03).

3. The device in accordance with claim 1 or 2, characterized in that a tip (12) of at least one paddle (09) crosses the conveying track (03) while the compartment (11) formed by the paddle (09) adjoins the conveying track (03).

4. The device in accordance with one of the preceding claims, characterized in that the circumferential speed of the paddle wheels (08) is less than the conveying speed of the conveying track (03).

5. The device in accordance with one of the preceding claims, characterized in that each paddle wheel (08) has fewer than five paddles (09).

6. The device in accordance with one of the preceding claims, characterized in that each paddle wheel (08) has exactly one or two paddles (09).

7. The device in accordance with claim 1, characterized in that N corresponds to the number of different objects, which are arranged one behind the other on the conveying track (03).

8. The device in accordance with one of the preceding claims, characterized in that adjoining paddle wheels (08) rotate at a phase shift of $2\pi(d/vT \pm 1/mN)$, wherein d is the distance between the paddle wheels (08), m the number of their paddles (09), v the conveying speed of the conveying track (03) and T the time interval between two printed products (13, 14) conveyed on the conveying track.

9. The device in accordance with claim 1, characterized in that the number N of the paddle wheels (08) is a whole number and greater than equal to 3.

10. The device in accordance with one of the preceding claims, characterized in that the number N of the paddle wheels (08) is four.

11. The device in accordance with one of the preceding claims, characterized in that a transverse cutting device (01) is placed upstream of the conveying track (03).

12. The device in accordance with claim 1, characterized in that the conveying track (03) has a horizontal section, at which the paddle wheels (08) are arranged.

13. The device in accordance with claim 11, characterized in that the conveying track (03) has a vertical section which follows the transverse cutting device (01).

14. The device in accordance with claim 1, characterized in that a section of the conveying track (03) is arranged between respectively two paddle wheels (08).

15. The device in accordance with claim 1, characterized in that all paddle wheels (08) are arranged on one side of the conveying track (03).

16. The device in accordance with claim 1, characterized in that all paddle wheels (08) are arranged below the conveying track (03).

17. The device in accordance with claim 1, characterized in that identical first objects are arranged in a first paddle wheel (08), and identical second objects,

which differ from the first objects, in a second paddle wheel (08).

18. The device in accordance with claim 1, characterized in that identical second objects are arranged in a second paddle wheel (08), and identical third objects, which differ from the second objects, in a third paddle wheel (08).

19. The device in accordance with claim 1, characterized in that identical third objects are arranged in a third paddle wheel (08), and identical fourth objects, which differ from the third objects, in a fourth paddle wheel (08).

20. The device in accordance with claim 1, characterized in that the axes of rotation of the paddle wheels (08) are arranged on one level.

21. The device in accordance with claim 1, characterized in that the objects are embodied as printed products.

22. The device in accordance with claim 1, characterized in that the conveying track (03) has conveyor belts (06).

23. The device in accordance with claim 1, characterized in that the device has a folding blade cylinder (07).

24. The device in accordance with claim 1, characterized in that the device has a collecting cylinder (07).

25. A method for depositing flat objects by means of a conveying track (03) and paddle wheels (08), wherein the objects are transported one after the other along the conveying track (03), and one of these objects is taken off the conveying track (03) and is transported into a compartment (11) of a first paddle wheel (08), characterized in that the remaining objects are transported along the conveying track (03) to a second paddle wheel (08) which, in relation to the transport direction of the conveying track, is arranged downstream of the first paddle wheel (08), and one of these objects is taken from the conveying track (03) and is transported into a compartment (11) of the second paddle wheel (08).

26. The method in accordance with claim 25, characterized in that the remaining objects are transported along the conveying track (03) to a third paddle wheel (08) which, in relation to the transport direction of the conveying track, is arranged downstream of the second paddle wheel (08), and one of these objects is taken from the conveying track (03) and is transported into a compartment (11) of the third paddle wheel (08).

27. The method in accordance with claim 26, characterized in that the remaining objects are transported along the conveying track (03) to a fourth paddle wheel (08)

which, in relation to the transport direction of the conveying track, is arranged downstream of the third paddle wheel (08), and one of these objects is taken from the conveying track (03) and is transported into a compartment (11) of the fourth paddle wheel (08).

28, The method in accordance with claim 25, 26 or 27, characterized in that objects which respectively different printed images are taken out.